Dyes and Pigments **16** (1991) 329–331

CONTENTS OF VOLUME 16

Number 1

Photostabilisation of Colorants for Imaging and Data Recording Systems: Effect of Metal Carboxylates on the Lightfastness of Colour Formers 1
HIRONORI ODA & TEIJIRO KITAO (Japan)

Study of Vinyl Sulfonyl Reactive Dye Intermediates in the Coimmobilization of Enzymes and Coenzymes 11
XU JUN, ZHU ZHENG-HUA & LOU YI-XIN
(People's Republic of China)

Synthesis and Properties of *N*-Alkylbromoperylene-3,4-dicarboximides . . 19
YUKINORI NAGAO, YOSHIMOTO ABE &
TAKAHISA MISONO (Japan)

Synthesis of Functional Bromothymol Blue Dyes for Surface Attachment to Optical Fibers 27
B. S. RAO, J. B. PUSCHETT, B. M. KARANDIKAR &
K. MATYJASZEWSKI (USA)

Spectrophotometric Investigation and PPP-MO Calculations of Some Phenylazophthalimide Dyes 35
K. WOJCIECHOWSKI & J. SZADOWSKI (Poland)

Studies on the Addition of Reactive Compounds to the Dyebath of Non-reactive Dyes: Part I. Improvement of the Colour Strength of Fabrics Dyed with Direct Dyes 57
M. KAMEL, B. M. YOUSSEF, MAGDA M. KAMEL &
M. M. KAMEL (Egypt)

Azo Dyes Based on Phenolic Oligomers: Part 2. Arylene Azo-Naphthol-Formaldehyde Oligomer Dyes 69
HASMUKH S. PATEL & BABU D. LAD (India)

Diazotization of 2-Amino-6-methoxybenzothiazole at Elevated Temperature . 77
A. PENCHEV, D. SIMOV & N. GADJEV (Bulgaria)

Dyes and Pigments (**16**) (1991)—© 1991 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Number 2

Synthesis and Properties of Some Pyridone Chromium Complex Azo Dyes . . 83
ING JING WANG, YU JEN HSU & JYN HEN TIAN (Taiwan)

Colour Theory of Polyfluoromethine Systems: 1. Single Fluorine Atom in the Polymethine Chain 93
M. N. USHOMIRSKY & L. M. YAGUPOLSKII (USSR)

Effects of Hydrating Water Molecules on the Aggregation Behavior of Azo Dyes in Aqueous Solutions 111
KUNIHIRO HAMADA, HARUHIKO NONOGAKI, YOSHIHIRO FUKUSHIMA, BALJIR MUNKHBAT & MASARU MITSUISHI (Japan)

Nucleophilic Substitution on Arylazo Compounds: Part IV. Reactions of Chloro-Substituted Arylazonaphthalenes with Primary and Secondary Amines . . 119
HORST HARTMANN, MARGIT SCHULZE & RALF GUENTHER (FRG)

Nature of the Absorption Bands of Pyrylocyanines: Heteroanalogues and Isomers 137
A. D. KACHKOVSKI, M. A. KUDINOVA, N. A. DEREVJANKO & A. I. TOLMACHEV (USSR)

New Non-linear Polycyclic Azaphenothiazine Dyestuffs 149
CHARLES O. OKAFOR & UCHE C. OKORO (Nigeria)

Number 3

Relationship between Aggregation and Degradation of an Azo Dye in Aqueous Solutions 165
KUNIHIRO HAMADA, MASUMI NISHIZAWA & MASARU MITSUISHI (Japan)

Effective Length of the Annelated End-Groups of Polymethine Dyes . . . 173
G. G. DYADYUSHA, A. D. KACHKOVSKI & M. L. DEKHTYAR (USSR)

Synthesis, ^{1}H-NMR, Mass and Electronic Absorption Spectra of 4-(1-Alkylbenz-[cd]indol-2-ylidene)-2,5-cyclohexadien-1-ylidenepropanedinitriles . . . 183
R. NAEF (Switzerland)

Polycyclic Compounds Part VII. Synthesis, Laser Characteristics and Dyeing Behaviour of 7-Diethylamino-2H-1-benzopyran-2-ones 197
N. R. AYYANGAR, K. V. SRINIVASAN & THOMAS DANIEL (India)

Simultaneous Oxidative and Reductive Photofading of C.I. Reactive Red 22 and Black 5 on Cellulose in the Presence of Oxygen and Substrate under Wet Conditions 205
YASUYO OKADA, HIROMI MOTOMURA & ZENZO MORITA (Japan)

Studies on UV/Vis Absorption Specta of Azo Dyes. Part 26. Electronic Absorption Spectra of 4,4'-Diaminoazobenzenes 223
HEINZ MUSTROPH (FRG)

Some Monoazoacetoacetanilide Pigments Derived from Heterocyclic Diazo Components. 231
ROBERT M. CHRISTIE, WILLIAM T. DRYBURGH &
PAUL M. STANDRING (UK)

A Spectrophotometric Study of the Tautomeric and Acid-Base Equilibria of Methyl Orange and Methyl Yellow in Aqueous Acidic Solutions . . . 241
KHALID M. TAWARAH & HAKAM M. ABU-SHAMLEH (Jordan)

Number 4

Interaction between Water-Soluble Polymers and Azo Dyes Containing Fluorine Atoms. 2. Sulphonated Monoazo Dyes Containing Pentafluoroaniline as a Diazo Component 253
KUNIHIRO HAMADA & TOSHIRO IIJIMA (Japan)

Estimation of Water Solubility and Octanol/Water Partition Coefficient of Hydrophobic Dyes. Part I: Relationship between Solubility and Partition Coefficient 261
GEORGE L. BAUGHMAN & ERIC J. WEBER (USA)

The Dyeing Behaviour of Cotton Modified with Chloropropionyl Chloride and Related Compounds 273
X. P. LEI & D. M. LEWIS (UK)

Estimation of Water Solubility and Octanol/Water Partition Coefficient of Hydrophobic Dyes. Part II: Reverse-Phase High Performance Liquid Chromatography 291
MIAOLIN HOU, GEORGE L. BAUGHMAN &
THERESA A. PERENICH (USA)

Further Studies of the Use of Commercial Syntans as Anionic Dye-Resist Agents for Wool 299
S. M. BURKINSHAW & N. NIKOLAIDES (UK)

Syntheses of 3,4-Bisaryl-3-cyclobutene-1,2-diones and Related Heterocycles . 309
MASARU MATSUOKA, HIROSHI SOEJIMA &
TEIJIRO KITAO (Japan)

Matrix Selection for the Analysis of Hydrophilic Dyes by Fast Atom Bombardment Mass Spectrometry 317
HAROLD S. FREEMAN, ZHIMIN HAO,
JOLANTA SOKOŁOWSKA-GAJDA,
RICHARD B. VAN BREEMEN & JOHN C. LE (USA)